

APPLICATION NO.

10/672,194

26574

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FILING DATE

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7590 SCHIFF HARDIN, LLP

PATENT DEPARTMENT

6600 SEARS TOWER CHICAGO, IL 60606-6473

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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. P03,0353 8940 **EXAMINER** 

GLEITZ, RYAN M

ART UNIT PAPER NUMBER

2852

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Ralf Selinger

·	Application No.	Applicant(s)
	10/672,194	SELINGER ET AL.
Office Action Summary	Examiner	Art Unit
	Ryan Gleitz	2852
The MAILING DATE of this communication appears on the cover sheet with the correspondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on		
• • • • • • • • • • • • • • • • • • • •	action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
<ul> <li>4)  Claim(s) 1-30 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-3,6,8-11,15,16,19-22,24-27,29 and 30 is/are rejected.</li> <li>7)  Claim(s) 4,5,7,12-14,17,18,23 and 28 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>		
Application Papers		
9) ☐ The specification is objected to by the Examiner.  10) ☐ The drawing(s) filed on 26 September 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/26/03</u> .	6) Other:	atom reprioration (1-10-102)

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#### **DETAILED ACTION**

#### Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "intermediate carrier ribbon" (claims 18 and 28) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### Specification

The disclosure is objected to because of the following informalities:

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"(not published)" (line 21, page 1) should be deleted because the document is published and that publication is cited on Applicant's Information Disclosure Statement.

Appropriate correction is required.

#### Claim Objections

Claims 8-11 are objected to because for the following informalities:

"polarity" (claim 8, line 3) should be --polarities--; and

"the mixture" (claim 9, line 2) lacks antecedent basis.

Appropriate correction is required.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6, 8-11, 15, 16, 19-22, 24-27, 29 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Bares (US 5,404,215).

Bares discloses a device for lifting magnetizable carrier particles including a collecting element, bead pick off device (74), having a cover (76) which is rotatable around a stationary stator (col. 4, lines 49, 63) including at least one magnet (82, 83) having a pole arranged relative to the cover (76) such that the magnet's magnetic field attracts ferromagnetic carrier particles that are located on a carrier at a distance of an air gap, as shown in figure 3. A surface of the cover (76) comprises at least one screw-thread-like spiral (80) which, given rotation of the cover (76), moves the carrier particles in an axial direction relative to the cover, as shown by figure 2.

Regarding claim 2, the carrier (76) carries a mixture made of toner particles and ferromagnetic carrier particles (col. 3, line 41), and the spiral (80) has at least in a section at least one of a shape of a channel and an elevation, as shown by figure 2.

Regarding claims 3 and 6, the magnet is tapered as shown in figure 2 to allow the carrier particles to fall into a sump, but additionally a graduated magnetic shielding or shunting approach could be utilized (col. 5, lines 50-65), which reads on a discarding device is arranged on a circumferential surface of the cover (76). The cover (76) is designed as a non-magnetic hollow cylinder that conveys the incoming carrier particles in an axial direction relative to the cover (76). The discarding device is arranged opposite a predetermined catch location, sump (90), for carrier particles on the cover (76).

Regarding claim 8, two magnets (82, 83) poles face outwards in a radial direction and have different polarites.

Regarding claims 9-10, figure 3 illustrates one pole of the magnet (84) faces the mixture made of toner particles and magnetizable carrier particles, and both magnet poles have a predetermined angular separation from one another, the angle of separation is approximately 90 degrees.

Regarding claim 11, the views of figure 2 and 3 show that the magnet (82) facing the mixture made of toner particles and magnetizable carrier particles is designed such that it transports magnetizable carrier particles to the surface of the cover (76), and the other magnet (83) is designed such that, given rotation of the cover, it conveys attracted magnetizable carrier particles in the axial direction.

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Regarding claim 15, the space between the spirals (80) is a channel-like depression with a width and a depth dependent on a size of the magnetizable carrier particles (co. 6, lines 5-22).

Regarding claim 16, the device is bead-picking off device (74) working in collaboration with development station (C). The device (74) reads on a developer station in a printer or copier because is collects and stores developer.

Regarding claims 19-22, 24-27, and 30, the device above also reads on a method for lifting magnetizable carrier particles.

## Allowable Subject Matter

Claims 4, 5, 7, 12-14, 17, 18, 23, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Other Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shiraki et al. (US 6,196,958) disclose a toner supply role having a spiral on its outer surface.

Itaya et al. (US 4,530,597) disclose a brush cleaning device having a spiral on the outer surface of a sleeve and magnets inside the sleeve.

#### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Gleitz whose telephone number is (571) 272-2134. The examiner can normally be reached on Monday-Friday between 9:00AM and 6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K rg

Arthur T. Grimley
Supervisory Patent Examiner
Technology Center 2800

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